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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/[illegible]	10/10/99	FISCHER	R 0147-0189P

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EXAMINER	
KUBELIK, A	
ART UNIT	**PAPER NUMBER**
1638	10

DATE MAILED: 12/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/419,788	Applicant(s) FISCHER ET AL.	
	Examiner Anne Kubelik	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claims *1-37* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1638.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-13, 18, 36-37, drawn to a toxic fusion protein, classified in class 530, subclass 388.2, for example.

II. Claims 14-20, 29 and 36-37, drawn to a membrane-targeted pathogenicide, classified in class 530, subclass 350, for example.

III. Claims 21-26 and 36-37, drawn to a polynucleotide that encodes a toxic fusion protein, classified in class 536, subclass 23.4, for example.

IV. Claims 21-26 and 36-37, drawn to a polynucleotide that encodes a pathogenicide, classified in class 536, subclass 23.1, for example.

V. Claims 27-28, drawn to drawn to a host cell transformed with a polynucleotide that encodes a toxic fusion protein and a method of making a fusion protein, classified in class 435, subclass 69.7.

VI. Claims 27-28, drawn to a host cell transformed with a polynucleotide that encodes a pathogenicide and a method of making a pathogenicide, classified in class 435, subclass 71.1, for example.

VII. Claims 30-37, drawn to a method of making pathogen-resistant plants via transformation with a fusion protein-encoding gene and a plant made by that method, classified in class 800, subclass 279, for example.

VIII. Claims 30-37, drawn to a method of making pathogen-resistant plants via transformation with a pathogenicide-encoding gene and a plant made by that method, classified in class 800, subclass 301, for example.

Claims 18, 21-28 and 30-37 will be examined to the extent they read on the elected invention.

The inventions are distinct, each from the other because:

Inventions I, III, V and VII are unrelated to inventions II, IV, VI and VIII. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions different modes of operation and different functions. The fusion protein of invention I, encoded by invention III, requires more than one polypeptide domain and sequences encoding those domains, not required by inventions II, IV and VI. The pathogenicide of invention II, the nucleic acid encoding it in invention IV, and the cells or plants containing the nucleic acid in invention VI or VIII require membrane localization and cellular targeting sequences not required by protein of invention I, the gene of invention III, the cells of invention V, or the plants of invention VII.

Inventions I and II are unrelated to inventions III and IV. The different inventions have different modes of operation and different functions. The first two inventions are distinct from the second two inventions because the former require isolated proteins not required by the latter,

while the latter require isolated DNA not required by the former. Furthermore, the proteins of the first pair of inventions could be made by a process other than the expression of the gene of the second pair of inventions, such as chemical synthesis, and the DNA of the second pair of inventions may be used for processes other than the production of protein, such as a nucleic acid hybridization assay.

Inventions V and VI are unrelated to inventions VII and VIII. The different inventions have different modes of action, different functions, and different effects. The method of making a fusion protein of invention V and the method of making a pathogenicide of invention VI require methods of fermentation and cell culture not required by inventions VII and VIII. In addition, the methods of making pathogen-resistant plants of inventions VII and VIII require methods of plant transformation and regeneration not required by inventions V and VI.

Invention III is related to inventions V and VII as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case nucleic acid of invention III can be used for processes other than the production of the host cells of invention V or the plant cells of invention VII, such as nucleic acid hybridization assays.

Invention IV is related to inventions VI and VIII as product and process of use. In the instant case nucleic acid of invention IV can be used for processes other than the production of the host cells of invention VI or the plant cells of invention VIII, such as nucleic acid hybridization assays.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, fields of search, and classification, restriction for examination purposes as indicated is proper.

If applicant elects invention III, applicant may also choose to have one of invention V or VII coexamined with it. If applicant elects invention IV, applicant may select one of invention VI or VIII to also be examined. Claims will be examined to the extent they read on the elected invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (703) 308-5059. The examiner can normally be reached on Monday through Friday, 8:15 am - 4:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached on (703) 308-4310. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Anne R. Kubelik, Ph.D.
December 12, 2000

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~180~~ 1638